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12 October 1983

# USSR Report

TRANSPORTATION

No. 128

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12 October 1983

**USSR REPORT  
TRANSPORTATION**

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CIVIL AVIATION

BRIEFS

CZECHOSLOVAK L-410 FLIGHTS--KazTAG, Dzhezkazgan--The Czechoslovak-produced L-410, a comfortable 15-seat high-speed aircraft, made its first landing at the oblast center airport. Not only concrete, but also dirt runways are suitable for it. It can also fly at night as well as under icy conditions. Such liners will assume a considerable part of the movements now being performed by the AN-2. Regular L-410 flights soon will begin to Balkhash, Zhayrem and Karazhal. [Text] [Alma-Ata KAZAKHSTANSKAYA PRAVDA in Russian  
1 Jul 83 p 3] 6904

NEW AIR TERMINAL--TASS, Nizhneangarsk, Buryat ASSR--Fundamental reconstruction has begun on the main airport of the Western Sector of the Baikal-Amur Railroad, the Nizhneangarsk Airport. Builders have begun erecting a new air terminal building. Airport technical services will be outfitted with the latest gear, which will permit receiving aircraft in practically any weather around the clock. [Text] [Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian  
19 Jul 83 p 2] 6904

NEW PULKOVO RUNWAY--TASS, Leningrad--Computers which monitor air traffic in the Pulkovo Airport zone suggested an adjusted route to pilots for take-off and landing of multiplace liners. Several days ago the first aircraft were received by the new concrete strip of Leningrad's largest airport. From here they make regular flights to more than 200 cities of the Soviet Union and 20 foreign countries. The new runway increases the airport's throughput. It is far from city blocks, which reduces the noise level. Introduction of the new runway is an important stage in reconstructing the airport, which recently celebrated its 50th anniversary. New hangars have been erected here and installation of centralized aircraft refueling equipment is being completed. The automated Start-2 system, which will supplement the air traffic control computer complex, will expand considerably the sphere of influence of the electronic "controllers". [Text] [Moscow VOZDUSHNYY TRANSPORT in Russian  
11 Aug 83 p 3] 6904

NEW SMOLENSK AIRPORT--TASS--A contemporary air terminal has opened in Smolensk and has received the first passengers. Outfitting of the city's airport with modern navigation equipment will permit a considerable expansion in geography of local aviators' flights. The passengers also are satisfied as all conditions have been created for them here. [Text] [Moscow VOZDUSHNYY TRANSPORT in Russian 13 Aug 83 p 3] 6904

AN-2 MAINTENANCE HANGAR--Baku--The first mechanized hangar dock for maintenance of An-2 aircraft in Azerbaijan has begun operation at the Yevlakh Airport. It was erected from easily assembled structures delivered by Dnepropetrovsk Civil Aviation Plant No 409. The dock's impressive dimensions permit receiving two aircraft of light aviation simultaneously for servicing at all times of year and practically in any weather. Means of mechanization for assembly and disassembly of power plants, propellers and for other work have been installed in the "hospital" for An-2's. A self-contained power supply system allows maintaining aircraft around the clock. Old hangars being used for these purposes are being refitted for routine repairs of aviation equipment and agricultural equipment. Specialists' working conditions are improving in the enterprise's ATB [air maintenance facility], and work quality and aircraft servicing conditions are improving as well. Right after Yevlakh, installation of a hangar-dock for Mi-8 helicopters will begin at the Zabrat aviation enterprise. [By P. Georgiyev] [Text] [Moscow VOZDUSHNYY TRANSPORT in Russian 16 Aug 83 p 2] 6904

ARCTIC HELICOPTER CARGO HANDLING--Kara Sea--For the first time in the world a vessel has been unloaded under conditions of Arctic navigation on a shore unequipped with berths with the help of a helicopter. This intricately difficult work was done by test pilots of GosNII GA [Order of Labor Red Banner State Civil Aviation Scientific Research Institute], who began control tests of the new Ka-32 machine which soon will augment the inventory of Soviet civil aviation. "The 'hold-shore' unloading system is very promising under Arctic conditions. Polar stations often are on small rocky islands to which it is very difficult to deliver everything necessary using conventional means at the fleet's disposal. At times several days have to be spent for a cargo lot of 10-15 tons. As the present experiment showed, a helicopter can cope with such work in just a few minutes!" were the comments of K. Chubakov, chief of Northern Sea Route Administration, about the tests. "Seamen and polar explorers long have awaited the appearance of such a powerful Aeroflot 'flying crane' specifically adapted for work in the Arctic. Based on results of the first experimental flights the Ka-32 shows great promise here." [By our special correspondent B. Bychkov] [Text] [Moscow VOZDUSHNYY TRANSPORT in Russian 18 Aug 83 p 1] 6904

CSO: 1829/323

## RAIL SYSTEMS

### MINISTER KONAREV PRAISES EXPERIMENTS WITH LONGER, HEAVIER TRAINS

Moscow GUDOK in Russian 17 Jun 83 p 3

[Article by Minister of Railways N. S. Konarev: "A Broad Testing Ground for Heavy Trains"]

[Text] The Minister of Railways has sent a telegram to the chiefs of the Northern Caucasus Railroad (F. Kotlyarenko), Volga (G. Pisarev), Western Kazakhstan (R. Turganbayev) and Southern Urals (G. Tarunin) and to L. Nyukhalo, chief of the Groznenskiy division of the Northern Caucasus Railroad:

"The Ministry of Railways expresses its gratitude to railroaders of the Groznen-skii division of the Northern Caucasus Railroad who, jointly with scientists at the VNIIZhT [All-Union Scientific Research Institute of Rail Transport], have organized and run a heavy 10,000-ton train on more than 1,500 km of the Gudermes-Orsk sector.

Introduction of the experiment in running such consists has permitted, under difficult operating conditions, a reduction in car processing at the main junction stations, an increase in train transfers, accelerated freight delivery, and thus the mastering of higher shipment volumes.

The experiment has been conducted successfully thanks to much organizational work by the leaders of the Groznen-skii division, to the initiative and creative efforts of specialists in the locomotive, car, traffic and other systems, to the smooth operation of the dispatching apparatus on the Volga, Western Caucasus and Southern Urals Railroads.

The Ministry of Railways expresses its confidence that, by using the experience accumulated and by perfecting the organization and technology for running such trains, workers on the Northern Caucasus, Volga, Western Kazakhstan and Southern Urals Railroads will in the future be able to achieve an effective utilization of freight flows on the Caucasus - Astrakhan - Urals run.

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CSO: 1829/305

## RAIL SYSTEMS

### MINISTRY COLLEGIUM CITES FAULTS ON VOLGA, SOUTH URALS RAILROADS

Moscow GUDOK in Russian 12 May 83 p 2

[Article in column "Official Section": "On Serious Shortcomings in the Work of the Volga and South Urals Railroads"]

[Text] The Collegium of the Ministry of Railways examined the results of checks made on the Volga and South Urals Railroads for fulfilling the Collegium's decree of 13 December 1982 "On Measures for Fulfilling the Decisions of the November (1982) Plenum of the CPSU Central Committee on Rail Transport" and heard explanations from comrade Pisarev, chief of the Volga Railroad and comrade Tarunin, chief of the South Urals Railroad. It was noted that the necessary measures to fulfill set quotas had not been taken on the railroads indicated.

The situation with operations work deteriorated significantly on the Volga Railroad during the first quarter. In comparison with the first quarter of 1982, car handling at junction points was reduced by 3.5 percent. The rate of traffic through the Ozinki junction point was reduced by 25 percent and by 29 percent through Trusov. The surplus in the rail car fleet grew, now exceeding 11,000 cars. Car turnaround was slowed by 13 percent and now exceeds last year's level by 7 percent. Car idle time at maintenance stations increased. The level to which the schedule is met is extremely low, being 88.3 percent for passenger train traffic and 45.5 percent for freight trains. Planned quotas are not being realized for shipment of a number of the most important national economic cargoes. In spite of a significant restoration of the locomotive fleet, its mechanical condition has deteriorated. Maintenance of the railcar fleet, track and other equipment is being unsatisfactorily performed. A number of the most important economic indicators have grown worse.

On the South Urals Railroad, one of the best equipped railroads in the network, operations work has also deteriorated, the shipment plan has not been fulfilled and 470,000 tons of cargo have not been dispatched. More than 30,000 gondola cars have not been transferred according to regulating quotas, thereby complicating operation of the Tselinnaya and Kemerovo Railroads. Car turnaround has been slowed by 9 percent compared to the quota and last year's level. Car idle time at maintenance stations and under cargo operations has increased. The level for meeting the train

movement schedule has fallen off, being 94.8 percent for passenger trains and 43.8 percent for freight trains. Planned quotas for a number of economic and financial quotas are not being fulfilled. As a result of the unsatisfactory organization of maintenance and repair work, the status of the locomotive and rail car fleets has deteriorated. The percentage of locomotives not in working order has increased, and the number of cars uncoupled from their trains due to technical deficiencies has risen.

The situation with train traffic on the Volga and South Urals Railroads continues to remain unsatisfactory.

Serious shortcomings and oversights in the operation of the railroads appeared as a result of the fact that their administrators, primarily the railroads' chiefs comrades Pisarev and Tarunin, did not radically revise the style and methods of work management in accordance with the decision of the MPS Collegium of 13 December 1982, and they demonstrate carelessness and an irresponsible approach to fulfilling the set quotas.

The Collegium acknowledged that the chief of the Volga Railroad, com. Pisarev, and the chief of the South Urals Railroad, com. Tarunin, deserve to be removed from the positions they occupy for not taking the necessary measures to fulfill the 13 December 1982 decree of the MPS Collegium; for serious shortcomings in the management of the railroads in organization of operations and in maintenance of equipment; and for non-fulfillment of plan quotas for shipments for use of rolling stock and for economic indicators. However, taking into consideration their assurance that radical improvements in the operation of the railroads will be brought about, the Collegium decided to issue a sharp reprimand to the railroad chiefs, comrade Pisarev of the Volga Railroad and comrade Tarunin of the South Urals Railroad, and to warn them that if the indicated shortcomings are not eliminated based on work totals for the first half year, the question of removing them from the positions they occupy will be decided.

The Collegium entrusted deputy ministers and chiefs of the MPS administrations and the chiefs of the railroads to analyze the situation with regard to operations activity and realization of the transport plan in depth and from all sides and to provide for unconditional fulfillment of the 13 December 1982 decree of the MPS Collegium "On Measures for Fulfilling the Decisions of the November (1982) Plenum of the CPSU Central Committee on Rail Transport."

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CSO: 1829/303

## RAIL SYSTEMS

### SOUTHWESTERN RAILROAD DEMURRAGE PROBLEMS UNRESOLVED

Moscow GUDOK in Russian 6 May 83 p 2

[Interview with V. P. Denisyuk, inspector for USSR Committee of People's Control, by GUDOK special correspondent S. Osmolovskaya; date and place not given; "The Fruits of Non-Control--An Interview with Decree in Hand"]

[Text] In accordance with a decree of the USSR Committee of People's Control of 25 March 1983, Comrade Kozyuk, Saveliy Markovich, is to be relieved of duties as chief of the Container and Package Shipment and Mechanization of Handling Operations Service for the Service for the Southwestern Railroad for the gross violation of state discipline that was demonstrated in not taking measures to stop substantiated mass falsification of freight handling volumes and deceit in the use of railcars in subdepartmental enterprises.

First Deputy Minister of Railroads  
V. N. Gin'ko

In connection with this order, our special correspondent S. Osmolovskaya interviewed V. P. Denisyuk, inspector for the USSR Committee of People's Control.

[Question] The Committee of People's Control checked how the directives of supervisory bodies concerning organization of car loading and unloading at general use points is being carried out on the Southwestern Railroad. What did this check show?

[Answer] As you know, the mechanized sections for handling operations were established on the railroads to reduce car idle time during cargo operations. The task of completely taking upon themselves the servicing of clients who do not have their own sidings, and first of all to insure the unloading of cars intended for sovkhozes, kolkhozes and other agricultural enterprises and organizations was posed before the collective of these subdivisions.

This government requirement was fully supported materially. About R30 million was invested in just the Southwestern Railroad during the Tenth Five-Year

Plan and the two years of the current one for the development of freight facilities. The fleet of vehicles and mechanized equipment increased by 103 units, half of which was reconditioned. It would seem that all conditions for total fulfillment of established quotas had been created. But, what, in fact, happened?

The sphere of servicing for the section not only did not expand, but contracted. Freight handling volume declined by 3.5 million tons, and the return on investment declined by a factor of 2. Last year at the general use sites, the freight consignees themselves unloaded more than 1,400 cars per day on average. At only 70 of 183 stations did mechanized sections perform the work for the rural areas. At the rest, the cars were emptied by the consignees. This siphoned more than 200 persons off from agricultural work every day.

Instead of taking decisive actions to more fully satisfy the clientele's requirements for freight processing, the section managers resorted to falsifying figures, which, in a situation of lack of controls, took on a massive nature. For "processing" 800,000 tons of 'added on' cargo, the enterprises of the railroad, where checks were made, unlawfully paid out R102,000 in wages and recovered R158,000 from clients for work they allegedly performed. These machinations permitted the Kiev, Darnitsa, Zhmerinka and Korosten sections to make a successful accounting in 1982, although in fact they did not manage to achieve the quota for cargo processing.

During the course of the checks, a number of officials from the rail division and from mechanized handling sections were held accountable by local party bodies and committees of people's control.

[Question] Where, in your view, lie the main causes of the situation which has arisen?

[Answer] It is the lack of control and negligence, and the irresponsible attitude of certain main line commanders toward a task assigned to them. It can be said that with their silent connivance, the handling sections reoriented themselves, directing their efforts first of all toward processing such cargoes that would yield the great cargo processing volume without requiring significant labor expenditures.

Back in 1965 the MPS [Ministry of Railways] obliged the railroads to establish 7 mobile mechanized brigades to service the line stations. They simply neglected this directive. The production sectors started to work only at those stations where they were located. They even tried to hide equipment intended for the brigades out on the line. Out of 42 truck cranes assigned to the railroad, 36 are being used at building and installation jobs or they have been rented out to industrial enterprises. During the checks, neither the Deputy Chief of the Railroad comrade Yarchuk, nor the Chief of the Kiev Division comrade Zheleznyak, or the chief of the Container and Package Service comrade Kozyuk were even able to respond to the question on what work volume was and at which stations the divisions have not been included in the plan.

[Question] In the plans for the divisions, there is, in my opinion, a very important component: to provide the full mechanization for handling operations. It would seem that if fulfillment would permit the processing of various cargoes to grow and the labor intensiveness to be reduced, why did this not happen in practice?

[Answer] If one judges by the data under review, then the divisions, the level of full mechanization is very high, greater than 90 percent. But at what cost? Labor-intensive cargo coming to the line stations (and this is cargo of sovkhozes, kolkhozes and the "Sel'khoztekhnika" association) has fallen into the "unprofitable" category and such cargo was emphatically refused. The matter reached point where the Darnitsay and Kiev divisions, not having provided unloading service for 250,000 tons for rural areas, "fulfilled" the plan...on the sidings. Using their own vehicles, they unloaded 1.2 million tons of rubble and gravel....

The indicator grew, but at the divisions they ceased worrying about reducing manual labor when working with cargoes for the agricultural-industrial complex. Not a single facility has been built at the stations for mechanized emptying of cement carriers and hopper cars. Equipment was used poorly. Last year the output of railroad cranes, electric gantry cranes automated loaders and other equipment fell off. They broke down because the periods for planned recondition work and maintenance work were not observed.

[Question] All of this apparently should have resulted in the growth of car idle time. It is just this type of indicator that could have signaled the railroad managers that there was a mess in the cargo service!

[Answer] Undoubtedly, if the accounting had been done properly. In almost all of the stations which were checked, there was no account made of car idle time due to fault of the cargo handling sections. Moreover, the chiefs of the line stations of Kiev section began as a rule to show in their reporting that cars arriving addressed to sovkhozes and kolkhozes were unloaded within 2-3 hours. In fact, they stood idle right in front of their eyes for 2 days and longer. In the section however, they were listed as being empty. To the question, "Why did you do it?" the chiefs of the Drozdovka, Veresoch, Verteyevka, Muraveyka and other stations responded the same way: "When the idle time limits are violated, the section office makes inquiries and it is necessary to explain the reasons for the delays. This way everyone is satisfied..."

In Vinnitsa, for example, freight consignees had to empty 600 cars with light cargoes themselves. Individual cars stood idle up to 8 days in the freight yard. And this is what is noteworthy--not one of these cars which remained to be unloaded after the accounting deadline, working with which was entrusted to the railroad, was counted against the production sector. Without batting an eye, they shifted them the responsibility for the railcars to the consignees.

In violation of existing regulations, they started to consider idle time during cargo operations on the railroad not from the time the cars were brought to be unloaded, but from the instant freight lifting machinery and brigades of unloading hands started to work. This resulted in more than half of the production sectors ceasing to work at night, on weekends and on holidays.

As a result of such manipulations with reporting, data on car idle time at most of the stations which were checked were reduced by a factor of 3. For practical purposes, they made no attempt to combat deception. Moreover, at the end of 1982, management of the service reported to the Deputy Chief of the Railroad comrade, Yarchuk that in accordance with an order from the Minister of Railways concerning acts of falsifications and to improve control and inventory work, all handling divisions were subjected to an inspection and that "no gross violations in the reliability of reporting data had been established." In fact, the service made no checks.

[Question] Probably a completely well-founded reproach could be directed toward the Main Administration of Container and Package Shipments and Mechanizations of Handling Operations of the MPS?

[Answer] Yes, it poorly inspected the carrying out of directives from supervisory bodies concerning the organization of loading and unloading at general use sites for stations of the Southwestern Railroad. The causes for reductions in freight processing volumes and deterioration in the use of equipment on the railroad were not studied. In order to accelerate loading and unloading of rail cars, the USSR Council of Ministers in October, 1982, permitted the MPS to award bonuses to equipment operators and loading hands for reducing the established standard for rolling stock idle time. This stimulus is already benefitting the clientele on the sidings. But for the mechanized divisions, the standards have not yet been determined, nor has the status of bonus awards been finalized.

The main administration is devoting little attention to improvement in wages for loading hands. The estimates for manual operations have not been reexamined for a long time. Questions concerning the divisions' repair base and training of specialists for equipment maintenance remain critical. For some reason, the Main Administration for Material and Technical Supply released itself from a pledge to supply the sections' requirements completely. They do not even accept requests from them.

The established systems of transport service for the agrarian-industrial should function efficiently, precisely. This is why it is necessary for both the railroad management and the MPS to devote particular attention to this question.

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CSO: 1829/303

## RAIL SYSTEMS

### TGM7 DIESEL SHUNTING LOCOMOTIVE DESIGNED FOR SAKHALIN, FAR EAST

Moscow ELEKTRICHESKAYA I TEPLOVOZNAYA TYAGA in Russian No 6, Jun 83 p 32

[Article by V. M. Pervushin, laboratory director in the Khabarovskiy Institute of Railroad Transportation Engineers: "Testing the TGM7 Diesel Locomotive"]

[Text] The series TGM7 diesel locomotive is being manufactured in the Lyudinovskiy Diesel Locomotive Construction Plant. It is intended for shunting and train operations on the Sakhalinskiy Branch of the Far East Railroad (the track guage is 1,067 millimeters) where special engineer developments are required because of the comparatively small volume of freight, special climate conditions and intricate geological cross-section.

The TGM7 diesel locomotive consists of one section and has two jaw bogies with a wheel diameter of 950 millimeters. The power plant consists of a M56V diesel (12ChN, 18/20) with a capacity of 603 kilowatts, a hydraulic transmission and auxiliary equipment. All the wheel pairs are connected with each other by cardan shafts from the hydraulic transmission and form a group drive.

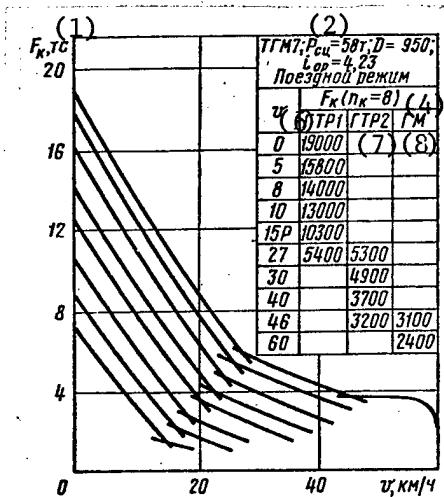
Scientists of the Khabarovskiy Institute for Railroad Transportation Engineers (KhabIIZhT) together with workers from the Sakhalinskiy Branch locomotive facilities have conduted pulling and operating tests of the new diesel locomotive. The research consisted of a number of trial trips with a dynamometer car and driving the train on sections which had level and mountainous route cross-sections. During this, the position of the engineer's control unit, thrust force, movement speed, revolutions of the diesel, fuel expenditure, diversion of power to auxiliary needs, the boxes of the wheel pairs, the feeding of sand, the kilometers travelled, and the time were continuously recorded on a tape of the parameters of the diesel locomotive's assemblies' functioning. In addition, the properties of the surrounding environment (temperature, humidity and air pressure) and the features of the route's cross-section were recorded.

The processing of the test data has permitted calculations to be made and the traction characteristics of the TGM7 diesel locomotive in the train and shunting operating modes to be obtained (cf. Fig)

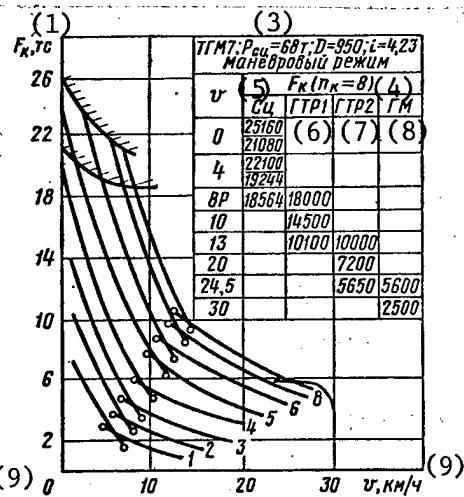
Traction Characteristics of the TGM7 Diesel Locomotive Under  
Standard Atmospheric Conditions ( $R_0=1013.3$  milli-  
pascals or 760 millimeters of mercury column at  
20 degrees centigrade:

a-- in the train mode; b-- in the shunting mode; 1-- the best conditions  
for coupling, 2-- the worst

a)



b)



Key:

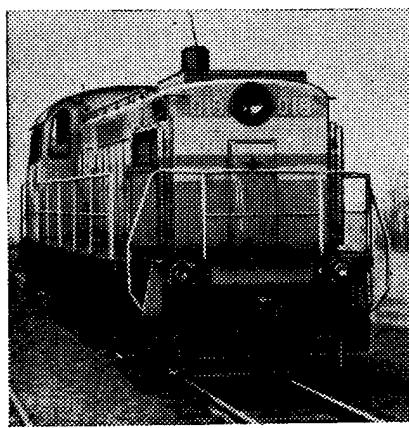
- 1.  $F_k$ , TS
- 2. TGM7;  $R_{sts} = 58t$ ;  $D = 950$ ;  
 $i_{or} = 4.23$ ; train mode
- 3. TGM7;  $R_{sts} = 68t$ ;  $D = 950$ ;  
 $i = 4.23$ ; shunting mode
- 4.  $F_k$  ( $N_k=8$ )
- 5. STs
- 6. GTR1
- 7. GTR2
- 8. GM
- 9.  $v, \text{KmPH}$

During the tests to determine the maximum traction force when starting off from a halt (the speed is within the limits of 0-2 kilometers per hour), the values 250-252 kN (25-25.2 ton-force) were recorded. This corresponds to an engagement coefficient of 0.37. The results were obtained moving on dry and clean rails with the feeding of sand and a one millimeter rolling of the wheels; the relative humidity was 65-70 percent. The high values of the locomotive's engagement coefficient are achieved because of the advantages of the group drive and the low rolling of the wheel pairs.

Operation of the TGM7 diesel locomotives with trains under actual conditions has shown that the power plant works with the greatest efficiency coefficient in the second and third gears of the hydraulic transmission and on sections with a level route cross-section. This circumstance assumes the locomotive's effective use in the train mode. The operation of trains on mountainous sections is less profitable because the diesel locomotive operates here with the engineer's control unit in the maximum power position or coasting (50 and 40 percent respectively).

They also observed the expenditure of diesel fuel. Both under nominal conditions and under intermediate ones its consumption depends negligibly on the movement speed and type of incorporated hydraulic equipment. When the diesel locomotive moves with the incorporated control unit or is at the halt, the expenditure of fuel increases with the growth in the rotational speed of the diesel's crankshaft and the diversion of power to auxiliary mechanisms (to the fan motor of the cooler and compressor). At 640 revolutions per minute, the expenditure of fuel is 5 - 7.5 kilograms for one hour of operation; and at 1440 revolutions per minute -- correspondingly 22 - 28.

The tests of the series TGM7 diesel locomotives have permitted their serviceability to be qualitatively evaluated under operating conditions on Sakhalin Island and freight shipments and shunting operations to be planned on a scientifically sound basis.



General view of the TGM7 diesel locomotive

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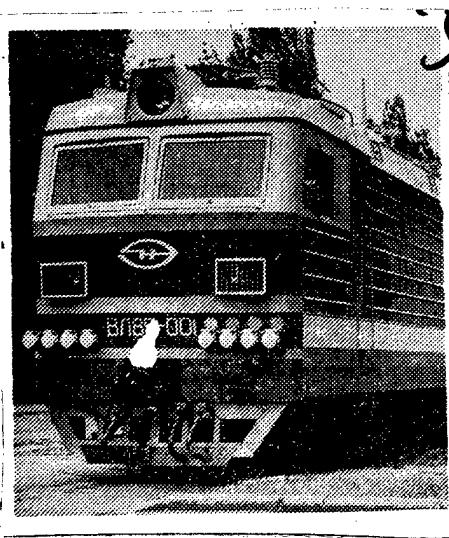
## RAIL SYSTEMS

FIRST VL85 ELECTRIC LOCOMOTIVE COMPLETED; WILL BE USED ON BAM

Moscow PRAVDA in Russian 23 May 83 p 7

[Article by M. Glukhovskiy: "Both Lightweight and Powerful"]

[Text]



The Novocherkasskiy Electric Locomotive Manufacturing Plant has completed installation of the first of a new family of herculean rail locomotives, the 12-axle mainline VL 85-001 electric locomotive.

The developers of this machine, production workers at the NEVZ [expanded above] and scientists at the All-Union Electric Locomotive Construction Scientific Research Institute (VEINII), have given it more than 10,000 kW of power.

Specialists found designs permitting a changeover to two sections instead of three, yielding a substantial gain: the machine is 12 meters shorter, saving large amounts of metal and other materials.

The prototype embodies a number of innovations: the locomotive can return a significant portion of the electric power to the contact circuit on long grades. The equipment permits controlling two locomotives from a single cab, meaning that, when coupled, the machines will be able to pull super-heavy consists weighing up to 10,000 tons.

Engineers praise the new cab. In terms of equipment and its excellent view, it reminds one of the cab of a modern commercial aircraft. The engineer's space is considerably larger, with improved ventilation and insulation.

This herculean electric locomotive will replace machines now serving the most heavily traveled mainlines in the country, including the BAM.

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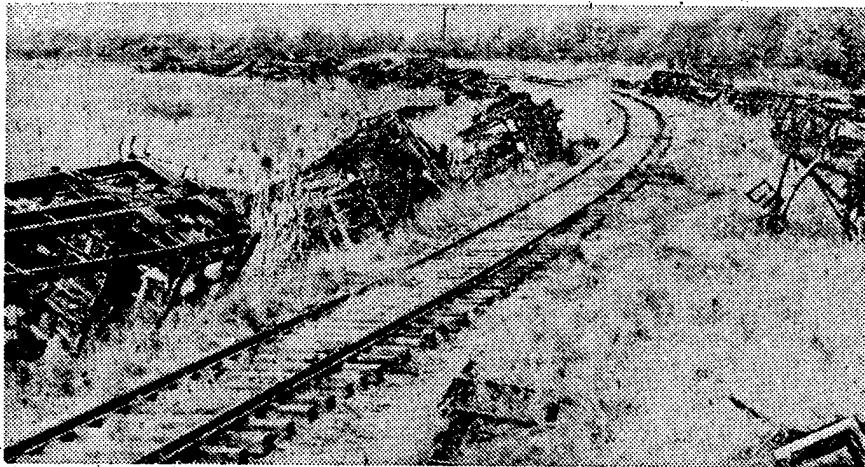
RAIL SYSTEMS

JUNKED RAILCARS LINE ROUTE NEAR ASTRAKHAN'

Moscow TRUD in Russian 21 May 83 p 2

[Article under the heading "Photo-Accusation": "Discards Beside the Road"]

[Text]



Cars abandoned to the whims of fate have lain here for five, ten or more years. Thousands of tons of metal perish under the open sky. Accountable for this mismanagement are the city of Astrakhan and the Astrakhan division of the Volga Railroad.

11052  
CSO: 1829/305

## RAIL SYSTEMS

### BRIEFS

TRAFFIC CONTROL AUTOMATED IN LITHUANIA--Introduction of an automated traffic control system has permitted a significant increase in throughput at the Kaunas rail junction, one of the largest in Lithuania. Dozens of switchmen have been freed to master new occupations. Henceforth, station dispatchers will need only a few seconds to send out a consist: by pressing a button, switches will be set in the necessary positions. The light signals and commands to the engineers will also be regulated automatically. The ASU's operation is monitored on an electronic illuminated track diagram on which dispatchers can see the activity of the whole extensive, complex station system. Automated traffic control systems will be introduced at all the rail junctions of Lithuania by the end of the five-year plan. [Text] [Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 7 May 83 p 1] 11052

LOCAL RAIL CAR REPAIRS--The Kirovabad Aluminum Plant imeni 50th Anniversary of the USSR is repairing tank and other rail cars itself. Consists leave the enterprise sidings only if in good repair. The plant has created special sectors and brigades of repairmen, who have already repaired more than 500 tank and other cars, helping the enterprise use rolling stock more effectively, accelerate output unloading and meeting its contractual obligations more precisely. Since the start of the year, the enterprise has been working smoothly, with the collective shipping out above the plan many thousands of tons of alumina, sulfuric acid and potassium fertilizer. Clients are also satisfied: Kirovabad workers are not letting them down. [By D. Melikov] [Text] [Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 13 May 83 p 1] 11052

NEW BAM HELICOIDAL COMPRESSOR--Penza, 12 May 83. The "Penzkompressormash" production association is manufacturing a new helicoidal compressor on order for BAM construction workers. It is intended for use at drilling facilities cutting tunnels and for building bridges. The compressor was developed by designers at the Kazan special compressor design bureau and by Penza specialists. It is very efficient, replacing five similar units used at drilling facility compressor stations. This means each drilling facility will save 5.5 tons of metal. At the same time, the drilling facility's productivity will be increased 30-40 percent and operating expenditures will be cut in half. The new compressor will be able to operate under the difficult climatic and geological conditions of the Far North, Siberia and the Far East. [By V. Vinogradov] [Text] [Moscow PRAVDA in Russian 13 May 83 p 1] 11052

USSR-POLISH RAIL AGREEMENT--Warsaw, 21 May 83 (TASS). A protocol was recently signed here on the further development of cooperation between the USSR and Poland in the area of rail transport. It was signed by USSR Minister of Railways N. S. Konarev, visiting the PPR, and PPR Minister of Railways Ya. Kaminskiy. This document, which is aimed at further simplifying ties between railroad workers in the two countries, anticipates improvement in the efficiency of freight turnover between Poland and the Soviet Union and improved through shipments. Particular attention was paid in the protocol to the better use of the broad-gauge mainline from the USSR border to Katovice, reserves for which are concealed in a further increase in the level of container shipments from Poland to the USSR, in deepening technical cooperation in the development of rail transport. [Text] [Moscow GUDOK in Russian 22 May 83 p 1] 11052

BAM REACHES MURURIN--Mururin (Chita BAM sector), 24 May 83. Builders of the Chita sector have won a great labor victory. The steel rails of the main track have reached Mururin, 56 km west of Khan. This section of track has been a major test for all BAM construction subdivisions. About 70 bridges and water bypasses had to be built on it, and nearly five million cubic meters of earth had to be removed. Construction-installation trains Nos 576 and 596 of the "BAM-stroyput" administration and the 54th and 76th bridge detachments of the "Mostostroy-10" trust have been models of highly productive labor on this proving ground. [By V. Orlov] [Text] [Moscow PRAVDA in Russian 25 May 83 p 1] 11052

USSR-FINNISH BORDER RAIL STATION--Yesterday, a festive ground-breaking ceremony was held at Tosno-2 Station at the site of a future rail complex, jointly designed by Finnish and Soviet specialists, which is being built by the "Khaka" Finnish construction cooperative. The complex includes a repair depot and car preparation center. Trade and economic ties between the USSR and Finland are being strengthened and developed, their basis being a long-range program which defines the framework of this cooperation up to 1995. This is multilateral, mutually advantageous cooperation, one of whose manifestations is such joint plans. The "Khaka" cooperative is participating in their implementation. One major new project of the cooperative is construction of this rail complex, which will be repairing up to 6,000 cars each year. Start-up of this project will permit improvement in the repair and servicing of cars, which is very important to the more efficient use of rolling stock. [By V. Tarasenko] [Excerpt] [Leningrad LENINGRADSKAYA PRAVDA in Russian 27 May 83 p 4] 11052

CHARA DEVELOPMENT ON BAM--Chara (Chita Oblast), a permanent BAM railroad workers settlement, has begun bringing chiefs from Kazakhstan to the mainline's central section. Construction workers are faced with preparing a work front for putting up apartment complexes prior to the mainline tracks' reaching here late next year. Building complexes will reach this future settlement by rail. [Text] [Moscow TRUD in Russian 2 Jun 83 p 1] 11052

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## MARITIME AND RIVER FLEETS

### NEW PLAN INDICATORS FOR MARITIME, RIVER, OTHER TRANSPORT SECTORS

Moscow VODNYY TRANSPORT in Russian 28 Jun 83 p 2

[Article: "To Improve Planning in Transportation" followed by the commentary of specialist V. Shishko, chief of the maritime and river transport subdivision of the department of transportation of Gosplan, USSR]

[Text] The Central Committee of the Party and the Soviet Government in tandem are translating into reality the policy which was developed at recent Party Congresses including the 26th CPSU Congress, for increasing the efficiency and quality of work and for intensifying production in every possible way.

In this connection, the decree on improving the operation of the transportation system of the country adopted by the CPSU Central Committee and the Council of Ministers, USSR has tremendous significance. The decree is entitled: "On improving the planning and organization of the haulage of national economy cargoes and passengers, and on strengthening the influence of the economic mechanism for increasing the operational efficiency of the enterprises and organizations in transportation". A new system of planning indicators for basic transportation activities has been established, and the administrative levels at which they will be approved have been defined. In developing the system, the rich experience of the planning and development of the country's transportation system was taken into account. Also taken into account were the results of experiments conducted on the application of the new indicators and economic stimuli, and an analysis of the disadvantages of the generalized indicator freight turnover indicator, which has been used for a long time in planning transportation operations. The meaning of the individual planning indicators and the levels at which they are approved have been defined in a new way.

In a five-year plan, the following indicators have been authorized for the Ministry of the Maritime Fleet:

**Indicators of haulage:** The total amount of haulage (shipments) of national economy cargoes in tons, the total amount of haulage (shipments) in tons of cargoes in general purpose and specialized containers and in bales, and the revenues from foreign haulage after deducting expenses (in foreign currency).

In this, the specific character of the planning and operation of maritime transportation was taken into account. More than 90 percent of haulage in maritime transport is done in foreign navigation in which exports and imports are delivered and the cargoes of foreign charterers are delivered to foreign ports. The latter are mainly hauled as incidental freight on coinciding routes. Accounting for charter services is carried out in foreign currency and the amount in tons of the charter cargoes will not be included in the indicator of total haulage which is to be approved.

**Indicators for capital construction:** The placing into operation of productive capacity and important facilities including an increase in capacity as the result of technical retooling or the modernization of existing enterprises, the placing into operation of fixed assets, the maximum amounts for state capital investments and construction and repair work including outlays for technical retooling and modernization of existing enterprises, the total amounts or quotas for the formation of funds for development of production.

**Indicators for finances:** Profits, the cost of haulage, the maximum amount (limiting level) of material expenditures (expressed in money) per ruble of operations.

**Indicators for labor and social development:** The assignment for the productivity of labor calculated according to natural indicators (or according to income), the maximum numbers of industrial, office, and professional workers, the total fund for wages or the quota of wages per unit of production in accordance with the indicator used in planning the productivity of labor, the total amounts or the quotas for the formation of the funds for material incentive, for social and cultural matters, and for housing construction.

**Indicators for the adoption of new equipment:** main assignments for the fulfillment of scientific and technological programs; mastery and application of new equipment, new and highly efficient technological processes for hauling freight and servicing passengers; the main indicators of technological level for the branch; norms for the creation of a unified fund for the development of science and technology.

**Indicators for material and technical provisions:** The amount for the procurement of the primary kinds of ships and other material and technical resources, the assignments for the average reduction in the norms for the consumption of fuel and electrical energy.

In annual plans of the Ministry of the Maritime Fleet, only the following indicators will be approved: Indicators concretely defining or in some cases, refining, the assignments which have been established for the corresponding year of the five-year plan, the total amount of haulage (shipments) of national economy cargoes in tons, the total amount of haulage (shipments) in tons of cargoes in general purpose or specialized containers and in bales, revenues from foreign haulage after deducting expenses (in foreign currency), the placing into operation of productive capacity and important facilities, including an increase in capacity as result of technical retooling or modernization of existing enterprises, the placing into operation of fixed assets, profits, the cost of haulage, the maximum amount (limiting level) of material expenses (expressed in money) per ruble of operations, the amount for procurements of the primary kinds of ships and other material and technical resources, payments into the state budget and appropriations from the state budget.

The total amount of haulage (shipments) in tons of exports and imports in annual plans will be approved for the Ministry of the Maritime Fleet by Gosplan, USSR.

The enumerated indicators, except for revenues for haulage of foreign cargoes and passengers less expenses, and except for the total amount of exports and imports also will be approved for river transport of general use. In this, in five-year and annual plans, only the following indicators are specified to be approved at higher level:

**Indicators of haulage:** The total amount of haulage (shipments) of national economy cargoes in tons, the total amount of haulage (shipments) in tons in general purpose and specialized containers and in bales.

**Indicators for capital construction:** The placing into operation of productive capacity and important facilities, including an increase in capacity as result of technical retooling or modernization of existing enterprises.

**Indicators of material and technical provisions:** The amount for procurements of the primary kinds of ships and other material and technical resources.

The remainder of the enumerated indicators and also the total amount of passenger-miles in river transport will be approved in five-year and annual plans by the Councils of Ministers of the Union republics.

It also is specified that the Councils of Ministers of the Union Republics, in coordination with the USSR Gosplan, will approve in five-year and annual plans for river transport the total shipments of cargoes according to the established products list and according to the ministries and departments which are the shippers.

Assignments for labor productivity, for the introduction of new technology, and other indicators are not being approved at higher level or by the Councils of Ministers of the Union republics. The Ministry of the Maritime Fleet and the administrative bodies for river transport establish them in the annual plans on the basis of assignments (quotas) in the five-year plan for the corresponding year. In this, if the quota for wages per unit output is not being established, the fund for wages is approved correspondingly by agreement with Gosplan, USSR and the state plans of the Union republics.

In five-year and annual plans, Gosplan USSR approves for maritime and river transport the amount of cargo turnover, the amount of haulage (shipments) in tons of through shipments by combined transport, and the assignment for reducing manual labor.

#### Specialist's Commentary

In accordance with the request of the editor, the chief, V. Shishko, of the maritime and river transport subdivision of the department of transportation of Gosplan USSR discusses the new system of planning indicators.

The new system is unified for all kinds of transportation for five-year and annual planning and covers all levels of planning from top to bottom. In addition, it takes into account the specific nature of the basic activity of individual kinds of transportation and the organizational structure of their administration. The amount of cargo turnover volume presently planned as the basic indicator of the operation of transportation, is becoming, basically, a resource. In addition, it retains its value as the indicator of volume in standard physical terms, which is used for calculating the throughput capacity of the fleet and in the apportionment of material and labor resources necessary for fulfilling planned amounts of haulage.

The decree notes that in working out five-year plans, transportation ministries and departments should reexamine the matter of reducing the standard period of time for delivering cargoes. We have been instructed to organize record keeping and planning, beginning in 1985, of transportation expenses in the national economy in order to reduce them, and also to develop in 1983 - 1984 measures for improving freight rates.

To increase the interest of labor collectives in accelerating the growth of the productivity of labor and reducing the turnover of personnel in transportation, measures have been outlined for economic stimulation and further development of independent accountability at all levels of administration on the basis of the five-year plan and long-term economic quotas.

It has been specified that an evaluation be made of the results of the economic activities of transportation enterprises and organizations and also of their economic stimulation taking into account the peculiarities of each kind of transport and based on the fulfillment of the approved planning indicators. That is, their fulfillment in accordance with: the total amount of haulage (shipments) of cargoes in tons, the shipment of cargoes by the established product list, the passenger miles, the revenues from hauling foreign cargoes after deducting expenses (in foreign currency), the productivity of labor, profits, and haulage cost. The funds for economic stimulation are to be formed through profits depending on the qualitative indicators of operations.

In this, the fund for material incentive and the fund for social and cultural measures and housing construction established through profits in the five-year plan (with annual distributions) and annual plans will be increased (or lowered) depending on the fulfillment of the assignments of the five-year and annual plans according to the following indicators (taking into account the peculiarities of the different kinds of transportation): the amount of haulage (shipments) of cargoes in tons including the shipments of cargoes by the established product list, the passenger-miles, the productivity of labor and the cost of haulage (profits). The funds also will be increased or decreased depending on the saving (or over consumption) in material expenditures compared with established limits. The fund for material incentive can also be formed in accordance with other qualitative indicators calculated in physical terms.

The important features of the new system are as follows.

The five-year plan is becoming the basis for planning transportation. In annual plans a limited number of indicators concretely defining and in some cases, refining, assignments which have been established for the corresponding year of a five-year plan will be approved at higher level.

Unification is provided for the majority of indicators and economic quotas for five-year and annual plans for all kinds of transportation and, at the same time, according to a number of indicators the specific nature of the operation of different kinds of transportation are taken into account.

The establishment of the amount of haulage (shipments) of cargoes in tons (including shipments of cargoes by product list) as the principal indicator in planning transportation operations is coordinated with the system of production indicators in the majority of cargo-generating industries in the national economy. And the decision that the transportation ministries are to conduct a thorough review with a view to reducing the standard times for the deliveries of cargoes when they are developing five-year plans, in the first place elevates the role of this standard and secondly, will provide for a greater guarantee of timely and qualitative delivery of cargoes to consumers which is the final result of transportation operations. This indicator will permit, what is no less important, providing more accurately for the planning of the interactions with associated kinds of transport.

The inclusion of the volume of haulage (shipments) in tons of containerized and baled cargo as one of the most important indicators, which are approved at higher level, and also the approval by USSR Gosplan of assignments for reducing manual labor, will inevitably provide powerful new stimulus for accelerating the development of these progressive technological transport systems.

The indicator of the growth of the productivity of labor, which is one of the most important evaluative and fund-forming indicators, acquires still more significance and will be approved at higher level for all of the Union transportation ministries.

It is also planned to reduce the number of indicators simultaneously approved in the plans in addition to the indicators for production, finance and labor, by placing a number of them into the category of limiting, standardizing and reference indicators.

The ministries and departments have been obliged to provide for carrying out the necessary preparatory work so that, in developing the Five-Year Plan for the Social and Economic Development of the USSR for 1986-1990, the whole complex of measures necessary to fulfill the assignments specified by this decree are provided for.

For this, it is necessary to develop methodical instructions, regulations, and other standardizing documents - both general transportation documents and departmental documents - about the introduction of changes in statistical accounting, in bookkeeping, and in accounting. It is also necessary to prepare proposals on the introduction of appropriate changes in operative legislation. Among such documents are:

- instructions on the development of state plans for the economic and social development of the USSR (in the section on "Planning Transportation" taking into account the peculiarities of the operation of each kind of general purpose transport),
- instructions on record keeping for transportation expenses in the development of the scheme for the geographical distribution and specialization of production,
- instructions for planning and record keeping on the productivity of labor in transportation,
- instructions about the procedure for determining quotas for wages per unit of output,
- instructions on the basic regulations for planning the hauling (shipments) of cargoes in tons,
- instructions on the development of quotas for the creation of reserves of productive capacity (throughput and carrying capacity),
- instructions on the formation and expenditure of the fund for material incentive and the fund for social and cultural measures and housing construction.

It is necessary to do all this in a compressed time period so as to provide in a timely fashion for the development of the five-year plan. The preparation of a number of the standardizing documents is in the concluding stage, and the regulations about annual and quarterly planning of the haulage of containerized and baled cargoes by all kinds of transportation including the haulage of cargoes in foreign trade and cargoes following through service on different kinds of transportation already have been approved. In addition, the acceleration is required of the development of documents connected with the planning of the principal indicators for haulage, for the total amount of haulage (shipments) of cargoes in tons, for haulage of exports and imports, and for planning the productivity of labor. Development of a general transportation products list of cargoes for planning also is required.

The acceleration of this work also is necessary in view of the advisability of introducing the individual new indicators with the plans for 1984 and 1985, not waiting until the beginning of the next five-year plan. In so doing, the intent is to simultaneously work out on the practical level an appropriate system of economic incentives.

For maritime and river transport there is a possibility of introducing a number of the indicators specified in the decree right now, in the current five-year plan. In this category are: the ChVV [expansion unknown] indicators, the amount of haulage of cargoes in tons in coastal transport, and, for the Ministry of the Maritime Fleet, the amount of haulage in tons of cargoes in containers and packets. The circumstance also should be taken into account that for the administrative bodies of river transport of general use, side

by side with the indicator of cargo turnover, the assignments for haulage (shipments) of cargoes in tons, including cargoes by the basic products list, and for passenger-miles and some others are being approved by the Councils of Ministers of the Union republics.

The new indicator, the ceiling (maximum level) for material expenditures (in monetary terms) per ruble of operating cost, is already being applied for the Union transport ministries this year, and the plan for freight hauled by combined transport has been approved.

In developing the general transportation standardizing documents, numerous problems inevitably arise in connection with the proposals of the ministries and departments and the need for fuller clarification of the specific directions for their activities. One of them is the final selection of the gages for planning the productivity of labor. There are proposals to adopt a comprehensive gage which would permit establishing a single assignment for the growth of the productivity of labor of all workers of a basic activity as a whole. It is thought that this is impossible, especially as in so doing, the real conditions determining the various possibilities for the rate of growth of the productivity of labor in different kinds of basic activity (transport, loading and unloading operations) are not taken into account in full measure. Besides, in such a comprehensive gage, the final production results of each kind of basic activity cannot be taken into account simultaneously. We still have a certain amount of work to do in order to specifically define the optimum gage for planning labor productivity in transportation.

We believe that we will find the optimum solution to these problems in maritime and river transport within the near future, taking national economic interests into account.

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## MARITIME AND RIVER FLEETS

### SUGGESTIONS FOR IMPROVING SHIP RELIABILITY, REPAIR

Moscow MORSKOY FLOT in Russian No 6, Jun 83 pp 52-53

[Article: "Raise Reliability and Maintainability of Vessels"]

[Text] An article by L. Kryshyn in the June 1981 issue of the journal opened a discussion of questions on the reliability and maintainability of vessels. Altogether more than 20 articles were published, which raised various problems of reliability and maintainability.

The editorial office has discontinued publication of articles on this subject and ordered a final article on this discussion. However, letters with readers' suggestions on improving reliability and maintainability of vessels continue to arrive. We are publishing suggestions by some of them below.

The letter from V. Lutsenko, senior scientific associate of the Far Eastern Polytechnical Institute, notes that vessels of new design have appeared in the past few years and sailing conditions in ice have become more complicated. However, the changes that are taking place are not being fully considered in existing normative documents, and as a result numerous damages occur on new vessels (particularly in the Arctic).

The standards of sectors must be supplemented by the USSR Registry regulations, but they are limited to terminology and do not provide quantitative indicators. Computation methods for determining reliability indicators require serious preliminary study and processing of statistical materials. But, in the opinion of V. Lutsenko, results of laboratory experiments are often not confirmed in practice because it is impossible to fully reproduce actual working conditions of an article.

"At present, the 'Moscow' type icebreakers are one of the largest series," V. Lutsenko writes, "but the experience in using them is not sufficiently generalized and taken into account. Miscalculations allowed in designing hull structures have led to overexpenditure of hundreds of thousands of rubles and hundreds of tons of metal for repairs. Increased wear of the heat affected zone of welded joints was encountered for the first time on vessels of this type."

No effective methods for preventing the wear have been suggested so far.

The wear of sheets of outer plating on the icebreakers considerably exceeds the indicators for vessels operating in ice-free water. Similar damages of hull structures were also observed on the transport vessels of the type such as "Amguema," "Pioneer," "Povenets" and "Belomorskles." The results of the research of vessel structure strength were not used to a sufficient degree, and similar damages have appeared on new icebreakers of the "Yermak" type.

"The experience in operating propelling complexes of icebreakers and transport vessels," V. Lutsenko says in his letter, "indicates that not all is well here also. Thus, during the 20-year operation of the 'Moscow' type icebreakers there were 30 cases of breaks of blades and 10 cases of cracks at blade shanks, and 24 propeller shafts were replaced. Numerous cases of appearance of cracks in screws and shafts were noted on transport vessels. Moreover, the use of complete welded bronze lining has resulted in appearance of cracks in their joints and corrosion of shafts in these places."

The increased speed of vessels caused an increase in the hydrodynamic loads from the working screw on the hull and vibrations of structures, which resulted in increased damages in the stern end and deterioration of habitable conditions.

Therefore, V. Lutsenko believes that it is not only necessary to attentively review the methods of approach to designing, building and operating elements of vessels but also to make certain existing positions more accurate. For example, hull structures which were damaged while in use and reinforced during repairs have very often successfully fulfilled their functions for many years. However, normative documents do not take this positive experience into account.

V. Lutsenko believes that the problem of reliability of vessels requires comprehensive research with a unified coordinating center, which is near the place where vessels are used under most difficult conditions. The seas in the Far East and the eastern sector of the Arctic are such regions. In this case the development of the ship repair base must not be forgotten, since not all plants are capable of repairing modern vessels, and particularly the perspective ones.

L. Ginzburg and G. Sheltov, specialists of the Black Sea Scientific Research and Design Institute [Chernomorniiprojekt], devote their remarks to the problems of raising efficiency in ship repair production. This problem is of great urgency in connection with demands for intensifying production.

"It would seem," they write, "that successful fulfillment of plans for developing and introducing new equipment and progressive technology, the use of modern means of mechanization and the change over to new forms in organizing production and control should have resulted in gradual reduction in the length of plant repairs of vessels, but this is not happening. The repair time for dry cargo and tanker fleet increased during the 1975-77 period, declined during the 1978-79 period and began to increase again beginning from 1980.

"Comparison of these repair time changes with the qualitative and quantitative changes of the fleet during the period being examined has indicated that the

increase in repair time coincides with the periods of greatest intensive replenishment of the fleet with specialized vessels. Analysis shows that to counterbalance the efforts made by plants to reduce the length of vessel repairs, the action of factors of opposite direction has intensified."

"Among them," the specialists of the Black Sea Scientific Research and Design Institute believe, "are the lack of preparedness by plants to repair specialized vessels of the new replenishment, increased complexity of technical means of vessels and considerable reduction in the maintainability of vessels of the new replenishment."

Limited experience in repairing the new fleet makes it impossible to evaluate with sufficient accuracy the significance of every aforementioned factor and their influence on the length of repair time. However, without substantially improving organization, the ship repair industry cannot ensure the assigned rates for increasing production efficiency.

"It seems," L. Ginzburg and G. Zheltov continue, "it is completely hopeless to expect that ship builders--the suppliers of vessels--would render essential assistance to the Ministry of the Maritime Fleet [Minmorflot] in ship repairs, despite the fact that all suggestions in this direction would meet interests of the work from state positions. Consequently, one of the priority tasks is to raise the maintainability of vessels which are already operating."

Until now, crews of vessels, ship equipment services and ship repair plants, with the assistance from the Central Planning and Design Bureau [TsPKB], solved specific ship repair tasks and raised maintainability of vessels assigned to them: modernized individual units from the standpoint of future repairs, introduced detachable plates and structures, made transport devices and so forth. Today, without reducing demands on designing as regards maintainability, it is obviously necessary to continue work on improving maintainability indicators of vessels which are already in operation by organizing it on a much higher and centralized level.

Raising efficiency in ship repair production can no longer be regarded simply as a task of plants. It is obvious that the counter task must be solved at the same time--raising the maintainability of the repair objects themselves on vessels that are under construction and already in operation.

It is unfortunate that this approach to solving the task aimed at raising ship repair efficiency was not reflected in corresponding instruction documents of the Ministry of the Maritime Fleet.

In the opinion of the specialists of the Black Sea Scientific Research and Design Institute, parallel to developing a comprehensive program of scientific and technical progress in the field of ship repairs it is necessary to begin forming an intersectorial integrated program aimed at raising the reliability and maintainability of vessels. The structure and content of the program should provide for raising maintainability of vessels that are being designed and under construction as well as of vessels which were added to the fleet during the past few years.

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## PORTS AND TRANSSHIPMENT CENTERS

### PROBLEMS IN OPERATIONS AT KIEV PORT

Moscow VODNYY TRANSPORT in Russian 16 Aug 83 p 3

[Article by P. Khristosenko, brigade leader of the joint brigade of the Kiev port; and A. Lev, captain of the ship "Volkhov": "The Dnepr is a River of Grain"]

[Text] Up until recently the grain flotilla of the Dnepr consisted of 27 ships of the "Medveditsa" type with a carrying capacity of 700 tons. These vessels have been used for over a quarter-century, and naturally they have aged physically and they have become obsolete. What can be done? New specialized ships are not being built at the plants of the UkrSSR Main Administration of the River Fleet, and attempts made by the republic's river transport workers to obtain such ships elsewhere have been unsuccessful.

Meanwhile, grain shipments on the Dnepr are increasing constantly; last year they exceeded one million tons. It is to the credit of the shore and fleet collectives that the water transport workers managed successfully to fulfill the planned volume of shipments. In order to accomplish this, they re-equipped for grain shipment 4 ships of the "Bol'shaya Volga" type with a carrying capacity of 2100 tons each; they also put a great deal of work into the repair of the moorages. In particular, the grain terminals in Berislav, Dnepryany, Kakhovka, and Zolotaya Balka underwent reconstruction. In an attempt to take some of the load off railroad transport and to take more agricultural products onto their own shoulders, river transport workers at the Kiev, Cherkassy, and Dnepropetrovsk ports installed additional materials handling equipment--multi-ton storage bunkers.

Supporting and developing the initiative of Odessa and Leningrad transport workers, every year the Kiev port collective signs an agreement on cooperation with collectives of cooperating enterprises--enterprises and organizations of railroad and motor transport. As a result, last year alone the average time spent processing the grain fleet was reduced there by 17 percent.

At the port the direct method for handling grain has been implemented, that is, ship-crane-bunker-railroad car. Some specific points should be mentioned concerning the bunkers. They hold 120 cubic meters of grain. In contrast to other bunkers used extensively on the Dnepr, they have 2 channels, 8 sections, and 8 automatic measuring devices. These features make it possible to load grain into two cars simultaneously.

Unfortunately, some disappointing errors and shortcomings occur even in the operation of a model port like Kiev. The "Volkhov" came into port one day in July. Due the dispatchers' negligence, it could not be unloaded immediately because the "Vychegda" was already being processed at the moorage of the second loading area. But soon after the river transport workers started to unload the grain from the "Volkhov", they had to stop working: the port had no railroad cars for carrying grain. It was only after five hours that the necessary cars were delivered.

The crews of the "Katun'", "Bug", and other ships have complained, with good reason, about how difficult it is to reach the Kiev grain elevator due to the construction of a new moorage in the area. River transport engineers in the Ukrainian capital should have focused their attention on this problem earlier.

Never before has there been so much criticism from ships' crews directed at the Dnepropetrovsk port workers. Due to the unsatisfactory technical condition of railroad spur tracks to the city's freight handling region, a railroad car loaded with grain derailed. This stopped work at the grain terminal for two days. In this case, the port management was at fault (V. Ishchenko is the director): it is the responsibility of river transport workers to repair the spur tracks. Recently the "Tselinograd", a river-sea type vessel with a carrying capacity of 2100 tons, stood idle in the port for almost a week instead of the planned one and a half days. The local transport procurator's office investigated the case of mismanagement.

It also cannot be considered normal when the pneumatic grain loader for the same city loading region at the height of the intensive labor period turned out to be at the Zaporozhye Shipbuilding and Ship Repair Plant. As a result, the capacity of the grain loading equipment was immediately cut almost in half. The UkrSSR Main Administration of the River Fleet and the port are trying to justify this by saying that by summer the loader had become almost totally useless. The logical question arises: wasn't it possible to determine the degree of wear on the grain loader during the winter, when the river transport workers were preparing equipment for navigation?

There are other problems in the work of the basin's port workers that are still not solved. For example, cleaning of grain vessels is done manually today, with the aid of brooms and shovels. There are still no special machines for this purpose in the Ukraine. There should be. Water transport workers waste a good deal of valuable time on manual labor in the transfer of the number one cargo. Local river transport workers do not have at their disposal specialized clamshell equipment for picking up loose cargo; this also slows down the processing of grain in the republic's ports. Shoddy handling of vessels also holds back the important work; many crews complain that they are not supplied well with fuel for their ships. It is clear that all these shortcomings found among river transport workers must be eliminated.

As this issue was going to press: The flow of grain cargo along the Dnepr has fallen sharply in recent days. Ukrainian river transport workers have shipped virtually all the grain that was obtained by procurement organizations from this year's harvest. Mass shipments of melons and vegetables have started. It has been decided that they will be delivered rapidly and with no losses.

## PORTS AND TRANSSHIPMENT CENTERS

### SPECIALIZED PORT FACILITIES FOR RO-RO VESSELS URGED

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[Article by M. Gavrilenko (the State Planning, Design and Scientific Research Institute of Maritime Transportation of the USSR Ministry of the Maritime Fleet [Soyuzmorniiprojekt]): "Ro-Ro Vessel in Port"]

[Text] Rapid development of the specialized fleet makes it necessary to create corresponding transshipment complexes in ports. Container terminals have already been built and equipped in many ports and docks have been adapted to handle ro-ro vessels.

The importance of creating specialized industrial transshipment complexes and equipping them with corresponding industrial equipment has become obvious. However, the work of ports in planning, receiving and transferring consolidated cargo units (UGM), collecting and processing information on cargo forwarding and accumulation and official registration of transportation and accompanying documents as well as organizing work of consolidated complex brigades (UKB) of dockers-machine operators still lags behind the technical possibilities of specialized means of transportation.

It should be noted that the standard process charts (TTK) and the working process charts (RTK), which are being widely used, are good practical aids for engineering and operations staff and complex brigades leaders and are conducive to a scientifically based approach to solving technological tasks which arise in a constantly changing production situation. Thus, the process of loading containers on containerships can be practiced so that it becomes an automatic action by adhering to established intervals, automatic block system signals and working process chart recommendations. An entirely different situation arises during organization of loading and loading operations on ro-ro vessels.

Ro-ro vessels of various type size are operating today practically in all maritime basins of the country. The difficulty in handling ro-ro vessels in port is in that these vessels have a considerable difference in the volumes of preparatory work.

Conditionally ro-ro vessels can be divided into three groups with the following generalizing technological characteristics (Table 1).

Table 1.

Indicators	Unit of Measurement	Ro-12 ("Inzhener Machul'skiy")	Ro-30 ("Skul'ptor Konenkov")	Ro-60 ("Magnitogorsk")
Planned carrying capacity	t	3,500	7,100	8,800
Number of decks (numerator) and their area (denominator):				
cargo	m <sup>2</sup>	3/3,100	5/8,485	5/16,321
suspended	m <sup>2</sup>	1/1,600	1/2,120	1/2,613
Ramp size:				
length	m	20.8	35.2	36.0
width	m	5.7	8.6	7.0
Maximum ramp load	t	65.0	60.0	60.0
Capacity:				
passenger cars	items	490	1,190	1,769
containers (in terms of a 20-foot container)	items	242	770	1,381

From the cited data one can see that vessels, belonging to one type as regards the technology of loading and unloading process, are quite incommensurable as regards the accumulation of vessel cargo, preparatory work and the volume of organizational work related to servicing.

If vessels of the first group (Ro-12) require an area of 4.0-6.0 thousands m<sup>2</sup> or three 50-car trains for sorting and accumulating a batch of vessel cargo, which can be practically allotted in any port and even on multipurpose docks, then completely other conditions are required for ro-ro vessels of the second and third groups.

Accumulation of a batch of vessel containers requires 3.2-fold more area for Ro-30 and 5.7-fold more area for Ro-60 than for Ro-12. It is practically impossible in any port to allot 15-18 thousand m<sup>2</sup> of area for preliminary storage of containers according to a vessel's loading plan. Owing to this, loading of consolidated cargo units on vessels is done directly from warehouses. Pulling out the needed consolidated cargo units from stacks is done during the process of cargo operations and, as a result, the intensiveness of loading on large ro-ro vessels is lower than on containerships or ro-ro vessels of the Ro-12 type and the loading process itself involves numerous shifting of consolidated cargo units.

Search groups have been created at individual port complexes and other measures are being adopted aimed at solving problems in intensifying handling of large ro-ro vessels. The comparison of estimates (taken at 100 percent) and actual work indicators of complexes in handling ro-ro vessels in the Riga port (dock No 20), where Ro-12s are handled, and in the Leningrad port (dock No 85), where Ro-30s are handled, testifies to their substantial differences (Table 2).

Table 2.

Indicators	Actually achieved indicator level for complex operations, in percent:	
	Riga (dock No 20)	Leningrad (dock No 85)
Cargo processing volume	107.6	105.4
Number of personnel	63.1	207.0
Capital investment utilization effectiveness	170.4	68.0
Production cost per 1 t of cargo	50	200

The cited data should alert all those who are involved in selecting type sizes of vessels and corresponding coastal facilities. The complex of dock No 85 is extremely limited in area, which entails deterioration of its work indicators: the layover time of vessels over and above cargo operations increased from 43.7 percent in 1979 to 52.4 percent in 1981 and to 55.1 percent in 1982. Outlays in the fleet for transshipping 1 t of cargo increased by 13.5 percent in the same period.

Large-capacity vessels are undoubtedly needed for operation on specific routes and long distance voyages. However, the Central Scientific Research Institute of the Maritime Fleet [TsNIIMF] and other design organizations in designing should consider the cost of coastal facilities, proceeding not from the volume of average annual shipments but from the necessity of concentrating vessel batches of consolidated cargo units and the possibility of intensifying the transshipment process to the maximum.

Moreover, cargo destined for numerous places is concentrated on dock No 85 of the Leningrad port. All of this makes operations of the transshipment complex difficult, does not allow utilization of technical possibilities of coastal and vessel technical means and lengthens the layover time of vessels in port.

The standard layover time in the Leningrad port of large-capacity ro-ro vessels, which sail to South and Central America or Southeast Asia, does not exceed 3-4 percent of the duration of their voyage. During the 1981-82 period, it actually amounted to 7-8 percent.

Increasing a vessel's layover time from 18-30 hours to 48 hours is completely justified by moral and social factors (the necessity of crew members to contact their home and family, to receive and turn a vessel over when crews are changed and owing to difficulties in fulfilling loading and unloading operations). However, this does not eliminate the need to seek ways for solving the problem of using a vessel's technical possibilities to the maximum.

Observations of work performed by consolidated complex brigades and warehouse workers in preparing consolidated cargo units at the Riga and Leningrad transshipment complexes makes it possible to conclude of how exceptionally important it is how much the brigades know about the location of cargo decks and sections of a vessel and how they find their way in warehouses.

Time studies of work performed by individual teams of a complex brigade show that one member of a brigade spends 20 minutes in installing a 40-foot container on a vessel. Other members of the same brigade, who have studied decks and sections of a vessel well, fulfill the same operation within minutes. An experienced container-hauling truck operator spends 25 seconds in lowering by ramp (to the lower deck) compared to 60 seconds spent by a less experienced one.

The same operator makes two approaches and aimings of a loader to take on a container, spending up to 40 second each time. A more experienced operator fulfills this operation in one approach and spends only 30 seconds.

A similar situation is observed in work done in warehouses. Warehouses workers, members of a complex brigade and even search group workers of each transshipment complex spend much time in looking for consolidated cargo units..

The most important tasks of maritime transportation workers are intensifying transshipment processes, reducing layover time of the specialized large-capacity fleet, raising labor productivity of complex brigades, reducing work pressure on operations, warehouse and dispatcher personnel and increasing the output per transhipping machine. Fulfillment of some organizational measures at a transshipment complex can contribute to solving them.

Consolidated complex brigades (and some financially self-supporting ones) have now been increased to a size which ensures handling of all transshipment processes connected with the processing of a vessel.

As indicated by time studies, it is necessary to have strict specialization of teams in such brigades not only in processing definite types of vessels, but, and this is especially important, in the types of operations being fulfilled by a brigade. In processing large-capacity ro-ro vessels, a vessel team must be specialized in decks, since cargo facilities on the lower deck have entirely different outlines and counters than the main and upper decks. Owing to this installation of containers or motor equipment there requires special skills.

Moreover, it is important that the cargo decks are divided into sectors and marked by distinct figures on bright shields hung in conspicuous places. The designations on cargo decks and on cargo plan forms for loading a vessel must be identical.

Such preparation of a cargo area will make it possible for an operator of a loading machine to determine accurately, and in accordance with the plan for loading a vessel, the spot where a consolidated cargo unit should be installed. Having the skill of working in narrow places, an operator will decide in advance where he should make a turn, a reverse or forward motion and so forth. Such preparation is of very important significance.

Knowing the location of consolidated cargo places in warehouses is of no lesser importance. Specialization of cargo warehouses in directions makes it possible for a coastal team of a complex brigade to find its way rapidly, to perform less sorting work and to transport a consolidated cargo unit to the side of a ship faster.

The existing practice in some ports of receiving a consolidated cargo unit from a railway and installing it in a vacant place without determining its further destination causes great harm. This type of unloading creates difficulties which restrain the intensiveness in processing vessels and railway cars.

Warehouse workers are at present assigned to definite warehouses, platforms, areas or a definite type of cargo (motor equipment) regardless where it is located. It often happens in practice when one warehouse releases cargo to several vessels and railway cars simultaneously, while at the same time another warehouse is neither dispatching or receiving cargo. In such situations, as a rule, the acceptance and transfer personnel make a switch to render assistance, but in neither case does anyone devote attention to preparing cargo for an arriving vessel, which will begin loading in 2 days according to a port's continuous work plan-schedule (NPGRP).

This is why the recommendation to include one industrial engineer and one engineer in charge of dispatcher operations in a consolidated complex brigade is completely justified.

For complete and highly productive work of a consolidated complex brigade of 40-60 people and even of more people in some cases, it is necessary to have work places technically prepared in order to prepare the volume of work in advance, which is planned according to a port's continuous work plan-schedule and a plan-schedule for processing a vessel, and to mark the cargo if necessary. The brigade leader should assign the necessary number of workers for this purpose.

Engineering support of a consolidated complex brigade will make it possible to increase its labor productivity, improve the use of equipment assigned to it and will, undoubtedly, accelerate processing of the fleet in ports.

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## PORTS AND TRANSSHIPMENT CENTERS

### PORt PERFORMANCE WRAP-UP FOR JULY 1983

Moscow VODNYY TRANSPORT in Russian 23 Aug 83 p 1

[Text] July added some distinct features to the work being done at transshipment centers: mass shipment of freight to points in the Far North and Far East was initiated; fresh fruit and vegetables started arriving in ports; and an intensive effort was needed to fulfill quotas for shipping cotton and synthetic fibers to light industry enterprises.

Transshipment centers operating at seaports on the whole fulfilled the plan for freight handling by 104.3 percent; the plan for loading and unloading operations involving import freight was fulfilled by 109.2 percent; and the plan for coastwise freight handling was fulfilled by 104.6 percent. The quota for forwarding transit freight was exceeded by a considerable margin. The plan for export shipment was not met: export freight received at transshipment centers fell short by more than 13,000 railroad cars.

Transshipment centers in Leningrad, Kaliningrad, Tallinn, Riga, Ventspils, Kerch, Novorossiysk, Batumi, Vladivostok, Nakhodka, Vanino, and several other locations were successful in fulfilling the July plan for freight handling.

The Leningrad workers had more success than the others: they overcame the temporary work stoppage that was planned at the end of the second quarter, and having successfully fulfilled the July quota (by 105.3 percent), they led in the results for the first 7 months of the years (they fulfilled the plan by 102.8 percent). The results of the Novorossiysk and Tuapse transshipment centers are also gratifying: they fulfilled the plan by 108.5 and 101.2 percent, respectively. Their work had been a source of some alarm over the first half of the year. However, in spite of the constant availability of import freight, it is still not being shipped out satisfactorily: compared to last year, almost a million tons less freight has been shipped out of Novorossiysk; and 160,000 tons less freight has been shipped out of Tuapse. This situation is primarily the fault of the contracting organizations--the USSR Ministry of Procurement, the "Eksportkhleb" [Grain Export] Foreign Trade Association of the Ministry of Foreign Trade, and the USSR Ministry of the Food Industry.

July also offered some hope for correcting the situation at two other major transshipment centers: the Poti center fulfilled the plan by 100.4 percent; and the Baku center fulfilled the plan by 102.1 percent.

The situation in Baku remains complicated by the unregulated arrival of cargo by ship and by rail. The "Soyuztranzit" [Union Transit] Foreign Trade Association should have put things in order here some time ago: interdepartmental measures that were agreed upon over a month ago are still not being implemented.

The Murmansk, Kandalaksha, Berdyansk, Makhachkala, Krasnovodsk, and Kholmsk transshipment centers did not fulfill their plans for freight transfer.

A characteristic feature of centers with stable operations is the fulfillment of quotas for all indicators: export, import, and coastwise shipments. As a rule, when one of the indicators is not fulfilled, it can be compensated by the other indicators only with difficulty; but even if this can be done, such results cannot be considered positive. Transshipment centers of the Danube Steamship Company are guilty of this quite often: in July Izmail fulfilled the plan for imports by 86.2 percent; and Reni fulfilled the plan for exports by 83.5 percent. The plans for coastwise freight were exceeded by large margins.

Transfer of coastwise freight is a fundamentally important indicator for transshipment centers that dispatch cargo to northern regions. Special attention should be given to speeding up the shipment of vegetables. Three centers are carrying the brunt of this work: Murmansk, Arkhangelsk, and Vladivostok.

In July the first two transshipment centers failed to fulfill the plan for transfer of coastwise freight (they fulfilled the plan by 78.7 and 84.6 percent, respectively); Vladivostok fulfilled the plan successfully (by 109.7 percent). In the first 10 days of August the Vladivostok workers were exceeding the plan, as before; the workers in the north were lagging behind. The October and Northern Railroads are justifiably expressing alarm over this situation. Railroad cars carrying potatoes have been standing idle for long periods of time waiting to be unloaded. In addition to the confusion over drawing up the proper documents and the poor quality of loading the cars which is the fault of the dispatchers and stations, there have been delays in the availability of the fleet and manpower shortages. There is no justification for the latter, since vegetables have been shipped to the North for decades; it is time to develop some constructive measures and to implement them promptly.

Compared to last year, 300 more vessels were processed in July at transshipment centers. An absolute majority of vessels were processed on time or ahead of schedule; 268 vessels had to stand idle for some period of time. The worst indicators for fleet processing were in Arkhangelsk (17 vessels had to stand idle); Leningrad (10 vessels stood idle); Odessa (9); Tuapse (11); Reni (36); Baku (11); Termez (26); Vladivostok (17); and Magadan (12).

Transshipment centers fulfilled the plan for total loading of railroad cars, with the exception of import freight shipment. Fulfillment of the plan for total unloading of railroad cars fell short by 10,600 cars due to a shortage of cars carrying export and transit cargo.

Transfer of through freight in July accounted for 49.1 percent of the operations at transshipment centers. Higher indicators were observed in Murmansk (65.4 percent); Leningrad (69.7 percent); Novorossiysk (62.1 percent); Batumi (70.2 percent); and Vladivostok (78.7 percent).

During the month import cargo remainders at transshipment centers declined somewhat due to a decrease in pipe. The plan for shipment was fulfilled in terms of tons, even though less was dispatched than in the previous month--almost a million tons less. There is a need for organization and accuracy in the centers' shipment of gas pipeline equipment. However, the ports' orders for flatcars carrying this cargo are being fulfilled by 42 percent, and for pipe itself, by 64.5 percent.

A strenuous effort is still being made in Riga to dispatch equipment; more equipment has accumulated there than at other centers. However, the Baltic Railroad is supplying only 5 railroad cars for an average daily quota of 30.

At the beginning of August there was an increase in remainders of perishable cargo, and ports' orders for specially-equipped railroad cars were met by only 50 percent; the Baltic Railroad was again among those falling behind. The container shipping situation in the Far East is not favorable. In Vostochnyy alone over 6000 containers accumulated and were waiting to be unloaded.

In July the river fleet shipped 77,200 tons of import cargo from maritime transshipment centers; this is one-fourth the amount shipped last year. This can be explained primarily by a decrease in the delivery of loose grain cargo. However, much less was received than could have been shipped out by the river fleet. Cooperating enterprises could be of great help if they would be more energetic in the transfer of general freight both in terms of delivering it to its destination, and transferring it to railroad cars at river ports.

In spite of the decrease in the daily shipments of import freight, there was practically no change in the amount of long-term preservation cargo (over 10 days); in some ports it even increased.

Cargo is being stored for more than a month, and even more than 3 months in Arkhangelsk, Leningrad, Riga, and Ventspils. In this instances one cannot blame a shortage of railroad cars alone; the problem most likely lies in a lack of initiative in the operations of commercial and warehouse services, and lack of control on the part of the transshipment center management and the "Soyuzvneshtrans" [Union Foreign Transport] Foreign Trade Association.

There needs to be an increase in the level of exploitation work, and creative maneuvering of the capacities of transshipment centers, rolling stock, and vessels, with the development and implementation of continuous plans and schedules. The order issued by the minister of the maritime fleet on 9 August 1983 (No 180) is directed at this; it confirms a new statute for organizing the processing of the dry cargo fleet in maritime ports. In addition to increasing the independence of ports in making operational decisions, there is a significant increase in their responsibility for final results. Success will depend to a great extent on how strong the ties are between cooperating enterprises in transshipment centers.

## PORTS AND TRANSSHIPMENT CENTERS

### PORt PERFORMANCE WRAP-UP FOR AUGUST 1983

Moscow VODNYY TRANSPORT in Russian 13 Sep 83 p 1

[Text] In August the most persistent work was done and the best results were achieved at the transshipment centers in Murmansk, Kaliningrad, Feodosiya, Yuzhnyy, Berdyansk, Novorossiysk, Poti, Batumi, Termez, Posyet, and Korsakov. The centers in Riga, Ventspils, Klaypeda, Baku, Makhachkala, Krasnovodsk, and Aktau did not manage to fulfill the plans for freight transfer. In the Far Eastern basin the Vostochnyy Port center failed to fulfill the plan. This is not the first time that these collectives have drawn attention to themselves because of a lack of coordination among transport workers, and among freight consignees and dispatchers.

It is especially bad when the transport workers treat each other negligently, or more accurately, when they treat their responsibilities negligently. It must be noted that in the Baltic regions railroad and steamship company managers are not involved enough with the transshipment centers and they do not coordinate their operations. This leads to strange situations, for example, 10 railroad cars loaded with equipment for gas pipeline construction become a problem for several weeks. During this time the fleet stands idle, causing the state huge losses. The flaws in regional coordination in August in the Baltic region, the Caspian Sea, and the Far East, should serve as a serious warning for the future.

Unfortunately, even the collectives that operated successfully in August allowed several serious errors. For example, in Murmansk a delay in the shipment of ore from the Norilsk combine made it necessary for the port to store over 200,000 tons of this cargo, which is the port's limit. The Dudinka-Murmansk conveyor essentially came to a halt. Up to 4 vessels stood waiting in Murmansk to be unloaded. Last year's experience was forgotten. The solution to this relatively simple problem lay in the organization of fixed rotations to Pechenga and Monchegorsk. The October Railroad remembered this solution at the beginning of September, and half of August had been wasted on fruitless correspondence. The October Railroad was just as inept in its resolution of problems involving the shipment of freight from Vyborg and Leningrad: 1100 tons of cargo stood in warehouses in Vyborg for all of August and the railroad did not meet its average daily order for 5 railroad cars.

In Leningrad at the end of the month there was more than 9000 tons of cargo (for an average daily order of 22 railroad cars, fewer than 6 were delivered).

August plans for freight transfer were exceeded in Vanino and Magadan. Nevertheless, the work of the Far Eastern Steamship Company and the Sakhalin Steamship Company with these centers cannot be recognized as positive. In the first place, the plan for shipment of Magadan cargo was not fulfilled in August. At the Vanino center the norm for railroad car unloading was not met once. Loading of vessels at Vanino was not performed well, which caused additional problems for the Magadan workers. The two steamship companies, acting independently, did not plan delivery of the necessary type of cargo to Magadan which would allow for most efficient use of motor vehicle transport (coal was not shipped; delivery of large-tonnage containers was delayed). As in the past, the delivery of motor vehicles to depots of USSR Gossnab and other consignees was interrupted. Once again it must be emphasized that the transportation centers alone, without coordinating their operations within a regional transportation plan, cannot completely solve the shipping problem. The Far Eastern Steamship Company should organize continuous coordination and should provide delivery to Magadan of at least 225,000 tons of cargo in September, which will guarantee the successful fulfillment of the USSR Gossnab quotas for 1983.

In August there was a sharp drop in the shipment of import freight. The average daily delivery for all transshipment centers was 2624 railroad cars, as opposed to 2624 cars in June of this year. There was poor delivery of railroad cars for all types of import cargo in Leningrad (81.5 percent); Kaliningrad (60.2 percent); Ilyichevsk (62.4 percent); Odessa (87.1 percent); and Nakhodka (68.6 percent).

There was a drop in the shipment of grain cargo compared to July: the average daily shipment of grain in August was 518 railroad cars less than in July and 190 cars less than in August of last year. A similar situation occurred in the shipment of pipe, metal, and other cargo. The delivery of railroad cars for perishable cargo and sugar was maintained at previous levels. On the whole, the level of import freight remainders in ports was the same as at the beginning of the month.

Several transshipment centers attempted to normalize the situation involving long-term preservation cargo; among them were Arkhangelsk, Odessa, Nikolayev, Reni, Kholmsk, and Leningrad. This problem has not been solved throughout the entire sector, however. Over the month the total amount of long-term preservation cargo decreased from 356,000 tons to 313,800 tons. Special attention should be given to cargo that is stored in ports longer than a month.

Port workers expressing bewilderment over the fact that there has not been adherence to the directive issued by N. S. Konarev, minister of railways, and the statement from the Ministry of Railways which appeared in the newspaper PRAVDA over the signature of Deputy Minister V. N. Budko, prohibiting the removal of empty railroad cars from ports that are holding import cargo. In August, in accordance with regulation assignments, 851 empty railroad cars were removed from the Kaliningrad port; 846 from the Vyborg port; 494 from the Riga port; 360 from the Ventspils port; 875 from the Klaipeda port; 930 from the

Poti port; 351 from the Ilyichevsk port, and so on. Clearly, the coordinating councils at transshipment centers should avoid such violations of directives from the Ministry of Railways. Care must be taken to see that railroad cars loaded at transshipment centers are loaded with import and transfer cargo. If daily plans for paired operations are not met, the appropriate railroad lines and the Central Coordinating Commission for Transportation Ministries should be informed immediately.

In August river transport shipped 86,300 tons of import cargo out of ports; motor transport shipped 36,500 tons. In connection with the difficulties being experienced with the railroad car fleet that is engaged in shipping this year's harvest, and with the beginning of the campaign to ship citrus fruits and canned goods, special attention should be given to motor transport.

The Ministry of the Maritime Fleet has coordinated monthly levels for motor transport shipment of cocoa beans, citrus fruits, and canned goods from maritime ports up to the end of 1983, with the Ministry of the Fruit and Vegetable Industry and the Ministry of Foreign Trade. These should be considered minimum quotas; and the shipment of other types of cargo should also be organized, keeping in mind that distances up to 1500 kilometers are coordinated.

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